# Montana Department of Natural Resources and Conservation Water Resources Division Water Rights Bureau

# **ENVIRONMENTAL ASSESSMENT**For Routine Actions with Limited Environmental Impact

#### Part I. Proposed Action Description

1. Applicant/Contact name and address: **B W Investments Co LLC** 

4450 Chickasaw Rd Memphis TN 38117-1717

- 2. Type of action: Water Right Change Application No. 30008614 41QJ
- 3. Water source name: Little Prickly Pear Creek
- 4. Location affected by action: **NESE Section 17, T12N, R5W**

Section 21, T12N, R5W

5. Narrative summary of the proposed project, purpose, action to be taken, and objectives: This change application proposes to take 30.3 acres out of irrigation; then use that water to fill and maintain two stock and fish & wildlife ponds. The ponds will have capacities of 24.6 and 12.0 acre-feet. Water for the ponds will be conveyed in the Gans Klein Ditch, the same ditch as the irrigation water that is being proposed for change. Diversions will be made from the Gans Klein Ditch to each of the ponds through a headgate on the ditch, a measuring device, and short length of new ditch leading to each pond.

The DNRC shall issue an Authorization to Change if the criteria in 85-2-402, MCA are met.

Agencies consulted during preparation of the Environmental Assessment: (include agencies with overlapping jurisdiction)

Montana Natural Heritage Program Montana Department of Fish, Wildlife & Parks Montana Department of Environmental Quality

#### Part II. Environmental Review

1. Environmental Impact Checklist:

#### PHYSICAL ENVIRONMENT

#### WATER QUANTITY, QUALITY AND DISTRIBUTION

<u>Water quantity</u> - Assess whether the source of supply is identified as a chronically or periodically dewatered stream by DFWP. Assess whether the proposed use will worsen the already dewatered condition.

Determination: Little Prickly Pear Creek from the mouth to mile 25.9 (near the confluence with Canyon Creek) is classified by Montana Dept. of Fish, Wildlife & Parks as periodically dewatered. The existing diversion is about 3 miles upstream from the mouth of Canyon Creek.

Only the quantity of water that was consumptively used by the crops on the 30.3 acres of proposed for retirement will be diverted into the ponds. The quantity of water that was not used directly by the irrigated plants, but flowed back to the source or to ground water will not be made available for use at the ponds. This should leave at least as much water in the source after the development of the ponds as previously, when 30.3 additional acres were irrigated. Any seepage losses from the ponds will make there way back into the system at undetermined locations.

<u>Water quality</u> - Assess whether the stream is listed as water quality impaired or threatened by DEQ, and whether the proposed project will affect water quality.

Determination: the Montana Dept. of Environmental Quality's clean Water Information Center indicates that Little Prickly Pear Creek, in the lower 16 miles of the channel (upstream to the mouth of Clark Creek – about half way up the stream to the diversion), will support all uses except aquatic life and a cold water fishery, which it does not support. From that point upstream, past the diversion, the source will support all uses fully, except for aquatic life and cold water fishery, which are partially supported.

Water, confined in two proposed ponds will not have the potential to move or flush nutrients or chemicals as it did when the water was applied for irrigation. The will not be any decline in water quality from the proposed ponds.

<u>Groundwater</u> - Assess if the proposed project impacts ground water quality or supply. If this is a groundwater appropriation, assess if it could impact adjacent surface water flows.

Determination: This proposal only involves the diversion of surface water from Little Prickly Pear Creek.

<u>DIVERSION WORKS</u> - Assess whether the means of diversion, construction and operation of the appropriation works of the proposed project will impact any of the following: channel impacts, flow modifications, barriers, riparian areas, dams, well construction.

Determination: The diversion structure, water measurement method, and primary conveyance will not change as a result of this proposed change. Water will be taken at two new secondary diversion points from the Gans Klein Ditch.

A headgate structure is planned for each of the secondary diversions from the Gans Klein Ditch. The flow will then be measured and conveyed through a short ditch to the pond. The overflow structures should only have to be used in an emergency since the flow to the ponds is regulated both by the main ditch and by the control structures near each pond. If spilled, water would flow into the applicant's irrigated field.

#### UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES

<u>Endangered and threatened species</u> - Assess whether the proposed project will impact any threatened or endangered fish, wildlife, plants or aquatic species or any "species of special

concern," or create a barrier to the migration or movement of fish or wildlife. For groundwater, assess whether the proposed project, including impacts on adjacent surface flows, would impact any threatened or endangered species or "species of special concern."

Determination: The Montana Heritage Project indicates that the following species of concern are found in the general area of the ponds.

- 1. Bobolink
- 2. Lewis's Woodpecker
- 3. Long-billed Curlew
- 4. Sage Thrasher
- 5. Brewer's Sparrow
- 6. Canada Lynx
- 7. Grizzly Bear

If anything, the addition of wet areas and the associated plant growth should offer additional habitat, especially for some of the bird species listed.

**Wetlands** - Consult and assess whether the apparent wetland is a functional wetland (according to COE definitions), and whether the wetland resource would be impacted.

Determination: The proposed ponds will be located in an area that is presently an irrigated alfalfa and grass field. There are no wetlands in the area to be affected by the proposed change.

<u>Ponds</u> - For ponds, consult and assess whether existing wildlife, waterfowl, or fisheries resources would be impacted.

Determination: Stock will receive the primary benefit from the proposed ponds, but, just because of their existence, the ponds will offer drinking water, habitat, and shelter for waterfowl and wildlife. The ponds will not make a difference in the, existing, general activity of farming the fields which surround the site of the ponds.

<u>GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE</u> - Assess whether there will be degradation of soil quality, alteration of soil stability, or moisture content. Assess whether the soils are heavy in salts that could cause saline seep.

Determination: Slopes in the area of the proposed ponds are relatively flat so some saturation of the soil in the vicinity of the ponds should not cause any stability problems. Any water seeping from the ponds would likely appear in the surrounding irrigated fields. This water, if present, would be partially used by the crop growing in the adjacent field.

<u>VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS</u> - Assess impacts to existing vegetative cover. Assess whether the proposed project would result in the establishment or spread of noxious weeds.

Determination: Weeds in the area of the proposed ponds are currently controlled through cultivation and competition from crops in the existing irrigated field. That practice will continue as it has in the past. The pond areas will be exposed to weed infestation, especially at the fringes. Water will be available from both the ponds and from the irrigated area surrounding the ponds, so establishment of desirable plants should not be difficult. Some weed control will probably be necessary during the first couple of years of permanent cove establishment.

<u>AIR QUALITY</u> - Assess whether there will be a deterioration of air quality or adverse effects on vegetation due to increased air pollutants.

Determination: There will no affects on air quality as a result of the placement and operation of the proposed ponds.

<u>HISTORICAL AND ARCHEOLOGICAL SITES</u> - Assess whether there will be degradation of unique archeological or historical sites in the vicinity of the proposed project.

2. Determination: The area has been used for cultivated agriculture for many years. Any sites of historic significance have been altered or destroyed by the field operations. No review of local sites of historical interest was made.

<u>DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY</u> - Assess any other impacts on environmental resources of land, water and energy not already addressed.

Determination: There will be no additional impacts on land, water, and energy resources.

#### **HUMAN ENVIRONMENT**

**LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS** - Assess whether the proposed project is inconsistent with any locally adopted environmental plans and goals.

Determination: There are no known environmental plans or goals for Little Prickly Pear Creek in the Canyon Creek area.

ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES - Assess whether the proposed project will impact access to or the quality of recreational and wilderness activities.

Determination: Since the proposed ponds will be located in an irrigated field, the range of recreational opportunities is already limited. Typically recreation could only take place in the late fall and winter, outside of the irrigation season. The ponds, by virtue of crating additional waterfowl and wildlife habitat, may increase the recreational opportunities for hunting or ornithology.

**HUMAN HEALTH** - Assess whether the proposed project impacts on human health.

Determination: The change application will have no affect on human health.

<u>PRIVATE PROPERTY</u> - Assess whether there are any government regulatory impacts on private property rights.

Yes  $\underline{\hspace{0.1cm}}$  No  $\underline{\hspace{0.1cm}}$  No  $\underline{\hspace{0.1cm}}$  If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights.

Determination: There are no additional government regulatory impacts on private property associated with this change application.

<u>OTHER HUMAN ENVIRONMENTAL ISSUES</u> - For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.

### Impacts on:

- (a) <u>Cultural uniqueness and diversity</u>? **No significant impact.**
- (b) Local and state tax base and tax revenues? No significant impact.
- (c) Existing land uses? No significant impact. Any minor land use impact would be to the land owner who is proposing the ponds.
- (d) Quantity and distribution of employment? **No significant impact.**
- (e) <u>Distribution and density of population and housing?</u> No significant impact.
- (f) Demands for government services? No significant impact.
- (g) Industrial and commercial activity? No significant Impact.
- (h) Utilities? No significant impact.
- (i) Transportation? No significant impact.
- (j) <u>Safety</u>? **No significant impact.**
- (k) Other appropriate social and economic circumstances? No significant impact.
- 3. Secondary and cumulative impacts on the physical environment and human population:

#### Secondary Impacts

There are no known secondary impacts due to the proposed placement of these ponds.

#### **Cumulative Impacts**

There are no cumulative impacts associated with the proposed action.

- **4.** Describe any mitigation/stipulation measures:
  - Special attention should be paid to seeding and/or weed control in the areas around the ponds that are disturbed during construction.
- 5. Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to consider: Water could be diverted from the Gans Klein Ditch, through a pipeline, to stock tanks in the fields. This system would require less water, but it would only operate during the time the ditch was charged with water (water could not be stored). Wildlife would not benefit as much from stock tanks and the maintenance on a pipeline system to supply tanks would be greater than for a ditch system.

## **PART III. Conclusion**

- 1. Preferred Alternative: The preferred alternative is the one selected by the applicant in this application.
- 2. Comments and Responses:
- 3. Finding: Yes No X Based on the significance criteria evaluated in this EA, is an EIS required?

If an EIS is not required, explain <u>why</u> the EA is the appropriate level of analysis for this proposed action: **No significant impacts were identified, therefore and EIS is not necessary.** 

Name of person(s) responsible for preparation of EA:

Name: Jim Beck
Title: Ag Specialist
Date: March 14, 2007